

Should generic curriculum capabilities be assessed?



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Abstract

Both Australia and New Zealand have recently taken up the idea of 'key competencies' ('capabilities' in the Australian national curriculum) initially proposed by the Organisation for Economic Co-operation and Development. In both countries we have made them our own by adapting them to suit our own educational contexts. People often say that these capabilities won't be taken seriously unless they are assessed. So whether, and how, to assess them

continue to be vexed questions. In this paper I argue that capabilities are more appropriately seen as *changing* the curriculum rather than *adding* to it. If we are serious about preparing students for the future, outcomes for learning need to be re-imagined at the complex intersection of capabilities and traditional content prior to determining any assessment approaches.

Key points

- Capabilities can be used as ‘ideas for teachers to think with’ as we re-imagine a curriculum for the future.
- Commentary on a curriculum for the future places increased emphasis on the quality of intellectual activity and on being able to use new learning in authentic demonstrations of capability (that is, real tasks where students choose and justify the best course of action, actively employing their new knowledge and skills).
- Assessment challenges include: providing opportunities for metacognition (students demonstrate their awareness of competencies in use); managing evidence derived in group contexts (learning is distributed); and aggregating multiple instances of competency demonstrations (opportunities vary and different aspects of each key competency are called into play in different contexts).
- Annotated e-portfolios provide one practical means of addressing all these challenges, but their effective use is reliant on the development of rich tasks that allow students to demonstrate their growing competency levels.

Introduction

Should capabilities be assessed and if so how? This has been a vexed question since the inception of so-called ‘21st-century’ national curricula in both Australia and New Zealand (Hipkins, 2007). These capabilities were introduced as one part of a curriculum framework intended to bring teaching and learning into the present, so there is an important prior question about the curriculum ‘work’ they are expected to do. In our most recent research we have found it useful to encourage school leaders and teachers to think about key competencies as ‘ideas to think with’ (Hipkins, Bolstad, Boyd & McDowall, 2014). If we restrict our thinking about capabilities to ‘things students should get more of’ it is too easy to fall back into familiar outmoded curriculum assumptions and miss the profound change potential in the very idea of building capabilities.

Rethinking purposes for learning

In previous curricula, the acquisition of knowledge and skills was largely taken as a given for assessment programs and practices. However, rapid social and economic changes, along with ever-more rapid evolution of uses and demands of digital technologies, have greatly expanded the range of types of outcomes learners need to achieve to be active participants

in modern life. A recent analysis of ‘21st-century’ competency-based frameworks identified four common sets of outcomes: collaboration; communication; literacy in information and communication technologies; and social and/or cultural skills and citizenship. Most frameworks also mentioned: creativity; critical thinking; problem-solving; and development of quality products/productivity (Voogt & Pareja Roblin, 2012).

The Australian Curriculum capabilities and the New Zealand Curriculum key competencies point towards these sorts of outcomes. The challenge is that they do not indicate *how* these types of outcomes are related to the knowledge and skills of the traditional curriculum. They might still be seen as *adding* to the curriculum — something to be assessed on top of (or instead of) traditional content. This understanding has led many schools in New Zealand to develop over-simplified rubrics for assessing key competencies as if they were generic personality traits of individual students. In my view this is neither appropriate nor fair, for reasons I will outline in the rest of the paper (Hipkins, 2009).

Developing reciprocal relationships between capabilities and traditional subject-based learning

Thinking differently about the relationship between capabilities and traditional curriculum content is helpful, but is not necessarily easy to do. We recently developed a suite of ‘engaging examples of practice’ that illustrate ways to integrate the New Zealand Curriculum key competencies into subject learning. Leading teachers were our inquiry partners in this applied research. All the examples the teachers helped us to shape demonstrate strong learning benefits when reciprocal relationships between the key competencies and more traditional subject area learning are strategically leveraged.

We noticed that all these teachers were thinking about two ‘layers’ of outcomes for the learning they designed. They had immediate goals (typically specific knowledge and skills) but they also had in mind longer-term goals — things they hoped students would become or be able to do in their futures (for examples see Hipkins & McDowall, 2013). The *pedagogy* they employed was critical to how they opened up opportunities for students to become more capable. This suggests that outcomes for learning need to be re-imagined prior to determining any assessment approaches. It also suggests that *what teachers do* to support capability development is as important as *what students do*. With this challenge in mind, we developed a self-audit framework to help teachers evaluate whether they were providing effective learning opportunities to support their students’ capability development.

Table 1 A self-audit tool to evaluate students' learning opportunities to build their capabilities (New Zealand Ministry of Education, 2012)

	Taking the initiative	Building connections	Being challenged
Design	Which key competency do I plan to foreground and why? How will my students know what my purpose is?	What relevant prior experience and knowledge might students have already? How do I plan to check?	What specific learning opportunity could this key competency or learning area create?
In action	How am I modelling and encouraging the capability I want my students to build?	Are/how are students identifying relevant connections to other learning and prior experiences?	Have I got the right balance between challenge and capability? How do I know?
Future focus	How have my students and I identified and documented their learning gains?	How might students use their strengthened capabilities in other contexts? What will support them to do so?	What new insights about the challenges and opportunities in this subject might my students take forward?

How could demonstrations of capability be assessed?

The assessment challenge changes when learning opportunities are re-imagined, but it doesn't go away. We still need a broad guide to the types of assessment tasks that could show the intended learning was successfully achieved. The following principles were distilled from multiple research–practice partnerships over the last decade, for a project that explored the question of whether and how we might assess students' development of 'international capabilities' (Bolstad, Hipkins & Stevens, 2014). These principles offer a guide for thinking about assessment task design and the type of data that might be captured.

Principle 1: Assess competency in action

Re-imagining learning as a 'complex performance' (Hipkins, Boyd & Joyce, 2005) brings together the content, the context and the targeted capabilities to undertake a rich task. Note that all the capabilities will be woven into a coherent whole in any one task situation. It follows that whichever of the capabilities is least developed will likely limit what students are able to do.

Rich tasks will often cross curriculum boundaries. This presents a greater challenge for designing learning experiences and assessments for secondary students than for primary students. Another challenge is that some aspects of capability are best enabled and demonstrated in group settings. Collaboration is an obvious example. Traditionally assessment judges the performance of an individual, regardless of how well the context enables or constrains that performance (in this case how well group dynamics allow collaboration to actually be demonstrated). Yet another challenge is that

collaboration in modern contexts is often virtual rather than face-to-face. This brings its own complex demands to engage in interactions with others who have different perspectives, negotiate shared meanings, and co-construct problem resolutions, all within virtual spaces (Dede, 2009).

Principle 2: Collate evidence from multiple sources

Performances can be variable for a range of reasons. This creates issues of validity and reliability, as these are traditionally understood. An implication is that more than one source of evidence will be needed. In any case, one indicator of stronger capability is that what the student knows and can do can be adapted and transferred from simpler to more demanding contexts. Some rich opportunities to demonstrate capability will be available in settings beyond the school. But how to gather, moderate and add that evidence to a record of learning is a challenge that most schools have yet to address.

Aspects of the chosen context for a performance can impact differently on different students' abilities in demonstrating their capabilities — their backgrounds and prior learning experiences can help them see the action possibilities in a task, or not. This means it will be important to take identity, language and culture into account, both when designing assessments and interpreting their results.

In essence, we need to design systematic ways to record learning achievements from multiple sources, including different contexts, and to keep this record building over time. Possible approaches include development of annotated portfolios of evidence or learning logs. These allow an assessor's observation of an authentic performance to be combined with a degree

of self-assessment. Learner input enables the assessor to include consideration of what the student was trying to achieve in the performance being judged (see also Principle 3).

Principle 3: Involve students in assessment decision-making

It is important to design assessment approaches that engage and involve students in gathering and reflecting on the evidence of their learning and growth. It's often said that we need learning approaches for the future so that students become 'lifelong learners'. Involving students in assessing their own learning makes a strong contribution to this future-focused aspiration. Each student needs to build their own 'assessment capability' (Absolum, Flockton, Hattie, Hipkins & Reid, 2009; Booth, Hill & Dixon, 2014). This enables students to get better and better at judging the quality of their own work, understanding assessment feedback, and seeing the big picture of what that feedback can and cannot tell them about their performance. The achievements of student athletes and their coaches show that this can be done — but both parties to the learning have to work at it.

Another reason to involve students in assessment is that developing metacognitive awareness of one's current capabilities and next learning challenges is an important aspect of stretching and strengthening all the capabilities (Hipkins, 2006). It's not enough to use current capabilities intuitively if we want to build adaptive expertise (that is, the ability to consciously change how we deploy our capabilities when the context or task require this).

If rubrics are used, students should be involved in conversations about their meaning, and take an active part in the judgement being made. Ideally, they would also be involved in constructing the rubrics in the first place. However, many questions still surround the nature of progression in capability development, so careful attention would need to be paid to any assumptions about the nature of progress being captured in the rubrics.

Implications

Experience in New Zealand schools suggests that it will be very demanding to design effective new curriculum and assessment tasks that encapsulate the principles outlined above. This will need to happen right across the curriculum, and at all levels of schooling. All teachers will need opportunities to take part in rich professional learning that unsettles tacit assumptions about purposes for learning and revisits the very idea of capabilities in a more expansive framing. The challenges for student learning and capability development apply to teacher learning too. Senior leaders need to be strong leaders of professional learning (Robinson, Hohepa & Lloyd, 2009) and make space for teachers to work collaboratively as they re-imagine a curriculum for the future.

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